

## Summary

5 The present invention relates to an optical sensor for  
the monitoring of combustion processes in a combustion chamber  
wherein the optical sensor at least comprises a lens system  
facing the combustion chamber, a waveguide and a sheath  
surrounding the lens system and one end of the waveguide  
characterized in that the lens system consists of at least one  
essentially plano-concave lens and a double concave lens  
10 wherein the planar surface of the plano-concave lens is  
exposed to the combustion chamber. The invention also relates  
to a method for the manufacture of said sensor.

(Fig. 1)